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P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

23446 7590 07/09/2010 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET

SUITE 3400

CHICAGO, IL 60661

EXAMINER
BAYARD, EMMANUEL
ART UNIT PAPER NUMBER
2611

DATE MAILED: 07/09/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/773,610	02/06/2004	Akira Yamanaka	17475US02	7768	
TITLE OF INVENTION: METHOD AND SYSTEM FOR EQUALIZATION IN A COMMUNICATIONS SYSTEM					

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 YES
 \$755
 \$300
 \$0
 \$1055
 10/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed of	ng the Patent, advance of nerwise in Block 1, by (	rders and notification a) specifying a new o	of m	aintenance fees v ondence address	ill be and/or	mailed to the current r (b) indicating a sepa	corre	spondence address as "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
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CHICAGO, IL 6	50661								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CC	NFIRMATION NO.
10/773,610	02/06/2004	•	Akira Yamanaka				17475US02		7768
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSU	FEE	TOTAL FEE(S) DUE	Т	DATE DUE
nonprovisional	YES	\$755	\$300		\$0		\$1055		10/12/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS						
BAYARD, E	EMMANUEL	2611	375-350000						
Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).      Otherwise of correspondence address (or Change of Correspondence									
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/1/22) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/4?, Rev 03-02 or more recent) attached. Use of a Customer Number is required.			C) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patter attorneys or agents. If no name is 1 sted, no name will be printed.						
PLEASE NOTE: Un recordation as set fort (A) NAME OF ASSI	less an assignee is ident th in 37 CFR 3.11. Comp GNEE	A TO BE PRINTED ON iffed below, no assignee pletion of this form is NO	data will appear on the transition of the transition of the transition (B) RESIDENCE: (C	he pai g an a	tent. If an assign ssignment. and STATE OR C	OUNT	TRY)		
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):	0	Individual 🖵 Co	rporati	ion or other private gro	oup er	ntity Government
4a. The following fee(s)  Issue Fee Publication Fee (N	No small entity discount j		b. Payment of Fee(s): ( A check is enclos Payment by credi The Director is he overpayment, to I	ed. t card	I. Form PTO-2038 authorized to char	is atta	iched. required fee(s), any de	ficier	
5. Change in Entity Sta	itus (from status indicate is SMALL ENTITY stati		□ b. Applicant is no	long	er claiming SMA	LEN	ITTY status. Sec 37 Cl	F12 1	27(a)(2)
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Authorized Signature			Date						
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# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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23446 75	90 07/09/2010		EXAM	UNER	
MCANDREWS I	HELD & MALLOY.	BAYARD, EMMANUEL			
500 WEST MADIS	SON STREET	ART UNIT	PAPER NUMBER		
SUITE 3400 CHICAGO, IL 606	i61		2611		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 739 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 739 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)
10/773,610	YAMANAKA ET AL.
Examiner	Art Unit
Emmanuel Bayard	2611

All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 4/29/10. The allowed claim(s) is/are 1-17.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - b) ☐ Some\* c) ☐ None of the:
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
    - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- 1. 

  Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-946).
- Information Disclosure Statements (PTO/SB/08). Pacer No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6 Interview Summery (PTO-413) Paper No./Mail Date 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 

  ☐ Other

Application/Control Number: 10/773,610 Page 2

Art Unit: 2611

### DETAILED ACTION

This is in response to amendment filed on 4/29/10 in which claims 1-17 are pending. The applicant's amendments have been fully considered therefore this case is in condition for allowance. In addition the pending claims have been renumbered as 1-5, 8-15 and 6-7, respectively.

### Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The prior art of record fail to anticipate or render obvious the following recited features. Wherein said block code based error correction scheme utilizes a feed forward equalizer filter for filtering at least a feedback signal comprising information from said at least one error correction code word, and wherein said feedback signal comprises phase data as recited in all the independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Schmidt et al U.S pub No 20030161421 A1.
- Sun et al U.S. Pub No 20050226341 A1.
- Hsu et al U.S. Patent 7,746,925 B1.

Application/Control Number: 10/773,610

Art Unit: 2611

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/12/2010

Emmanuel Bayard Primary Examiner Art Unit 2611

/Emmanuel Bayard/ Primary Examiner, Art Unit 2611